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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,873	12/01/2000	Elizabeth M. Denholm	IT 105	7540
23579	7590	02/23/2004	EXAMINER	
PATREA L. PABST HOLLAND & KNIGHT LLP SUITE 2000, ONE ATLANTIC CENTER 1201 WEST PEACHTREE STREET, N.E. ATLANTA, GA 30309-3400			MELLER, MICHAEL V	
			ART UNIT	PAPER NUMBER
			1654	

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 2

Application Number: 09/727,873  
Filing Date: December 01, 2000  
Appellant(s): DENHOLM ET AL.

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Patrea Pabst  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 8/8/2003.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because the art either applies to all the claims or not. This is the only art cited and it either applies to the claims or not.

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

5,985,582	Triscott	11-1999
6,153,187	Yacoby-Zeevi	11-2000

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoby-Zeevi (Yacoby) taken with Triscott.

Yacoby teaches treating a patient suffering from cystic fibrosis with chondroitinases, see col. 1, lines 24-67, col. 6, line 52-col. 7, line 33, col. 7, line 35-col. 8, line 40, and the claims. This would encompass organ fibrosis since cystic fibrosis affects among other parts of the body, the lungs.

Yacoby does not teach using chondroitinase B. Further, the reference does not teach administering the composition systemically, topically, locally, or in a controlled or sustained formulation.

Triscott teaches that chondroitinases such as chondroitinase B (applicant's elected enzyme) from *Flavobacterium heparinum* is known in the art, see col. 6, lines 30-43.

It would have been obvious for one of ordinary skill in the art to use a chondroitinase B in the process of Yacoby since Triscott teaches that different chondroitinases are known in the art such as chondroitinase B for therapeutic purposes. Since Yacoby is not specific which chondroitinase is being used in his process, it would have been obvious to use chondroitinase B since to use such a well known chondroitinase is well within the skill of the artisan and it would have been a matter of obvious choice for one of ordinary skill in the art to use chondroitinase B in an effort to optimize the results of the invention.

To use different routes of administration also would have been obvious since different routes are well known in the art and one would want to optimize the most ways of administering the enzyme composition to a patient in need of it.

To formulate a controlled or sustained release formulation also would have been obvious since one routinely would want to deliver the medication at different times or to allow it to go into the body slower.

**(11) Response to Argument**

Appellant argues that the use of the chondroitinase B in Yacoby-Zeevi is different from that of the claimed invention. They argue that the reference uses chondroitinase B to treat cystic fibrosis.

Appellants state on page 3 of their specification that they are treating pulmonary fibrosis. If this is true, which they state it is, then one would treat that when treating cystic fibrosis. How could one not ? So, since the reference treats cystic fibrosis then by definition they will treat a pulmonary fibrosis. Thus, applicants' argument is moot.

Next, appellant argues that Triscott does not teach applicant's invention. Appellant suggests that Triscott only teaches using chondroitinase B to modify heparin for use in antithrombin assay. The fact of the matter is that the reference was relied on to show that chondroitinases are interchangeable and all well known in the art to be used. Thus, Triscott establishes that chondroitinase would have clearly been contemplated by one of ordinary skill in the art to be used to treat the claimed condition.

Appellant also argues that the chondroitinase comes from a source different than appellants but on col. 5 of Yacoby-zeevi it is clear that the enzyme also comes from a bacterial source. It is well known in the art to use enzyme from many different sources and thus to use a human source also would have been obvious. The reference shows enzymes from humans.

Appellant also argues that skin disorders were not shown by the references to be treated by the enzyme. Appellant elected organ fibrosis as the disorder and

chondroitinase as the enzyme in the election as species. Thus, the examination was limited to organ fibrosis. The enzyme was found in the art and so was the disorder Yacoby-Zeevi teaches treating cystic fibrosis, chronic bronchitis, etc. with chondroitinase B), thus this argument is moot. Since organ fibrosis is being treated and not skin disorders then one would administer the enzyme as in an inhaler as taught by the reference. Appellants claims to topical application would not apply. Controlled or sustained release formulations are what an inhaler provide.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 1654

Respectfully submitted,



Michael V. Meller  
Primary Examiner  
Art Unit 1654

MVM  
February 4, 2004

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